Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

tabulated." The author concludes, however, that this study indicates that there are some three thousand or more words which are so commonly used that an individual of average intelligence might well know them. But it is not to be inferred that these all need to be taught in formal spelling lessons. Rather, it is suggested, attention should be given to the mastery of these words in connection with all written school work.

A second list[1] presents the 10,000 most commonly used words in a "count of about 625,000 words from literature for children; about 3,000,000 words from the Bible and English classics; about 300,000 words from elementary-school textbooks; about 50,000 words from books about cooking, sewing, farming, the trades, and the like; about 90,000 words from the daily newspapers, and about 500,000 words from correspondence. Forty-one different sources were used" (p. iii).

Accompanying the list is a notation scheme, the numerals and letters of which indicate the relative importance of the words according to the findings of this study. These notations show both the number of different sources in which the word was found and the frequency of its occurrence in all the sources. In the case of the 5,000 most important words, an additional notation shows in which thousand and in which half thereof the word occurs. Within the first 500 words there is a further distinction into hundreds; so that the teacher can readily determine the probable importance of any word as compared with the others of this list.

Each of these reports recognizes the limitations of the study as made and warns against the use of the list presented as a formal spelling list for use in schools. Each, however, may be used to good effect by the teacher in constructing spelling lists or in determining the treatment that is probably most valid in the case of any special word about which there is doubt.

Junior-college mathematics.—The plan of presenting mathematics by arranging in a homogeneous manner the material traditionally given in separate courses and under separate names is now followed by a number of authors of textbooks. Courses in general, unified, or correlated mathematics are taking the places of courses in arithmetic, algebra, geometry, and trigonometry. There is a general agreement among junior high school texts that the pupils should be introduced to mathematics as a whole. In addition to arithmetic, a considerable amount of algebra and geometry is offered in these courses. For the senior high school several texts in general and correlated mathematics are available. In the junior college the tendency toward unifying mathematical subjects seems to be even more marked in the high school, and recently several texts prepared from this point of view have appeared.

---

[1] EDWARD L. THORNDIKE, *The Teacher's Word Book.* New York: Teachers College, Columbia University, 1921. Pp. vi+134.

The pioneer work in the field was done by Woods and Bailey who published a two-volume series[1] in 1907. The authors state that "in arranging the material the principles of each subject are introduced as needed and the subjects developed together. The objects are to give the student a better grasp of mathematics as a whole and of the interdepending of the various parts, and to accustom him to use in later applications the method best adapted to the problem in hand, thus leading to greater familiarity with methods and greater freedom and skill in their application."

Similar arguments in favor of unified courses for the junior college are found in the prefaces of several textbooks. They are of interest not only to college teachers but also to teachers of secondary-school mathematics. In one of these books[2] the statement is made that "it aims to unify the essential and vital features of the work commonly covered in the past in separate courses in college algebra, trigonometry, and analytic geometry. The fundamental idea of the development is to emphasize the fact that mathematics cannot be artificially divided into compartments with separate labels, as we have been in the habit of doing, and to show the essential unity and harmony and interplay between the two great fields into which mathematics may be properly divided, namely, analysis and geometry.

In the preface of another textbook[3] for junior-college classes we find the following:

> The best course in any subject, and especially in any mathematical subject, is the course that best prepares the student both in attainment and in attitude to go on to the next. When mathematical material from all branches is so organized that the things studied at each level of maturity are the materials best adapted to this stage that are available in any of the branches, the organization that best prepares for the next advance is the best organization, whether the student actually makes the advance or not.

In one of the general courses[4] the function idea is the unifying factor.

> The book presents a coherent year's work in mathematics for college freshmen, consisting of a study of elementary functions and their applications to problems arising in various fields of knowledge. The subject-matter includes the essentials of plane trigonometry and topics from advanced algebra, analytic geometry, and calculus. The unity of the course is gained by an explicit analysis of the functions studied which enables the student to comprehend the purpose of the course as a whole.

---

[1] FREDERICK S. WOODS and FREDERICK H. BAILEY, *A Course in Mathematics*. Boston: Ginn & Co., 1907. Pp. xii+385.

[2] LOUIS C. KARPINSKI, HARRY Y. BENEDICT, and JOHN W. CALHOUN, *Unified Mathematics*. New York: D. C. Heath & Co., 1918. Pp. viii+522.

[3] E. R. BRESLICH, *Correlated Mathematics for Junior Colleges*. Chicago: University of Chicago Press, 1919. Pp. viii+301.

[4] ARTHUR SULLIVAN GALE and CHARLES WILLIAM WATKEYS, *Elementary Functions*. New York: Henry Holt & Co., 1920. Pp. xx+436.

The author of one of the most recent textbooks[1] in junior-college mathematics has the following to say in favor of a unified course.

> Under the traditional plan of studying trigonometry, college algebra, analytic geometry, and calculus separately, a student can form no conception of the character and possibilities of modern mathematics, nor of the relation of its several branches as parts of a unified whole, until he has taken several successive courses. Nor can he early enough get the elementary working knowledge of mathematical analysis, including integral calculus, which is rapidly becoming indispensable for students of the natural and social sciences. Moreover, he must deal with complicated technique in each introductory course and must study topics apart from their uses in other subjects, thus missing their full significance and gaining little facility in drawing upon one subject for help in another. The unified course enables even those students who can take only one semester's work to get some idea of the differential and integral calculus, trigonometry, and logarithms.

E. R. BRESLICH

Reorganization of mathematics for the junior high school.—The junior high school recognizes as one of its problems the reorganization of the courses of the intermediate grades better to meet the needs of the adolescent period of child development. A suitable selection and organization of material for the mathematics courses of these grades are problems with which supervisory officers and specialists in the field of mathematics have long been concerned. The numerous texts which are appearing in this field are evidence of the widespread interest in improving the situation with respect to this subject. Book I of a recent series[2] of junior high school texts in mathematics presents the author's idea of the type of readjustment that needs to be made in the course for the seventh grade.

Although it is now generally recognized that the material for courses in the seventh grade should be new, as well as adapted to the type of thinking done by children at this stage of maturity, the author devotes the first forty-seven pages of the text to review of material previously studied. What the course really needs at this point is an attack upon new problem material, letting the need for review and drill-work grow out of the attempts to master the new problem situations that are presented. Such review material as needs to be provided in the text, then, may better be presented in a final chapter, or distributed at intervals throughout the book.

The most important part of the arithmetic work in the grades is the application of percentage. If this topic is taught as applied to business relations, then it should be taught as late as possible in the grades. Mr. Hart has postponed most of the business side of the study of percentage to a later

---

[1] F. L. GRIFFIN, *Introduction to Mathematical Analysis.* Boston: Houghton Mifflin Co., 1921. Pp. viii+512.

[2] WALTER W. HART, *Junior High School Mathematics. Book I.* Boston: D. C. Heath & Co., 1921. Pp. ix+226.